|          | Index of Claims |                    |              |          |           |          |          |  |                 |              |          |          |  | Application No. |           |  |            |            |          |           |          |              |            | Applicant(s) |            |          |          |                     |               |         |                         |          |           |  |  |   |  |
|----------|-----------------|--------------------|--------------|----------|-----------|----------|----------|--|-----------------|--------------|----------|----------|--|-----------------|-----------|--|------------|------------|----------|-----------|----------|--------------|------------|--------------|------------|----------|----------|---------------------|---------------|---------|-------------------------|----------|-----------|--|--|---|--|
|          |                 | 1 1 <b>1 1 1</b> 1 | ,,,<br>11111 |          | ex<br>III |          |          | ء ہے۔<br>ا اللا                                  | 411.<br>        |              |          | 111      |  |                 |           |  | 11         | 10/647,409 |          |           |          |              |            |              |            |          |          |                     | MILLER ET AL. |         |                         |          |           |  |  |   |  |
|          |                 |                    |              |          |           |          |          |  |                 |              |          |          |  | Examiner        |           |  |            |            |          |           |          |              |            |              | Art Unit   |          |          |                     |               |         |                         |          |           |  |  |   |  |
|          |                 |                    |              |          |           |          |          |  |                 |              |          |          |  | Long Pham       |           |  |            |            |          |           |          |              |            |              |            |          |          |                     |               |         |                         |          |           |  |  |   |  |
|          |                 |                    |              |          |           |          |          |  |                 |              |          |          |  |                 | Long Pham |  |            |            |          |           |          |              |            |              | 2814       |          |          |                     |               |         |                         |          |           |  |  |   |  |
|          |                 |                    |              |          | _         |          |          | 1  |                 | Γ            |          | (TI      | hrou   | ah r            | un        | ner:   | al)        |            | Γ        | П         |          |              |            | $\Box$       |            |          |          |                     |               |         |                         |          |           |  |  |   |  |
|          | √   Reje        |                    |              |          |           |          |          | Rejected   |                 |              |          | ,        | hrough numera<br>Cancelled                       |                 |           |  | ,          |            |          | N Non-    |          |              | -Elected   |              |            | A        | Appeal   |                     |               |         |                         |          |           |  |  |   |  |
|          |                 | ^                  | Allowed      |          |           |          |          | +  |                 | Restricted   |          |          |  |                 | ſ         | 1  | Interferen |            |          | 300       | 1        | 0            | Objected   |              |            |          | 1        |                     |               |         |                         |          |           |  |  |   |  |
|          |                 |                    | =            |          |           |          |          |  |                 | Ľ            |          |          | Restricted                                       |                 |           |  |            |            |          |           |          |              | 6161       | 106          |            |          |          | Objected            |               |         |                         |          |           |  |  |   |  |
| Γ        | Cla             | im                 | Ι            |          |           |          | Date     |  |                 | _            |          | Claim    |  |                 |           | Dat  |            |            |          |           |          | 7            | С          | aim          | T          |          |          | Da                  | ıte           |         |                         | $\neg$   |           |  |  |   |  |
| <b>-</b> |                 |                    | 11           |          |           |          |          | ĬΤ   |                 |              |          |          |  |                 |           |  |            |            |          | T         |          |              | 7          |              |            |          |          | $\top$              | Ť             | T       |                         |          |           |  |  |   |  |
|          | Final           | Original           | 10 / 3       | -        |           |          |          |  |                 |              |          |          | Final  | Original        |           |  |            |            |          |           |          | 1            |            | Final        | Original   |          | 1        |                     | Ì             |         |                         |          |           |  |  |   |  |
|          | ۳               | ō                  | SV           |          |           |          |          |  |                 |              |          |          | ш  | ō               | ١.        |  |            | 1          |          |           |          |              |            | ш.           | ŏ          |          |          |                     |               |         |                         |          |           |  |  |   |  |
|          |                 | 3                  |              |          |           |          |          |  |                 |              |          |          |  | 51              |           |  |            | $\Box$     | $\Box$   | $\Box$    |          | 1            | ]          |              | 101        | $\Box$   |          |                     |               | $\bot$  | L                       | П        |           |  |  |   |  |
| }        |                 | 3                  | -            | $\dashv$ | -         | $\vdash$ |          |  | -               | _            | H        |          |  | 52<br>53        | <u> </u>  |  | $\dashv$   | $\dashv$   | +        | 4         | $\dashv$ | +            | ╡.         |              | 102<br>103 | $\vdash$ | $\dashv$ | +                   | +             | ╬       | ╁                       | +        | $\dashv$  |  |  |   |  |
| Ì        |                 | 4                  |              |          |           |          |          | ·_   |                 |              |          |          |  | 54              |           |  |            | ⇉          |          | $\exists$ | 士        | $\perp$      |            |              | 104        |          |          | I                   |               | 1       |                         |          |           |  |  |   |  |
| Ī        |                 | 5                  |              |          |           |          |          |  |                 |              |          |          |  | 55              |           |  |            | $\Box$     | $\Box$   | $\Box$    | $\Box$   | 1            | 7          |              | 105        |          | _        | $\dashv$            | $\bot$        | $\bot$  | L                       | $\Box$   |           |  |  |   |  |
| ł        |                 | 7                  | ŀ            |          |           |          |          | -  |                 | 56<br>57     | ├        |          | $\vdash$   | $\dashv$        | $\dashv$  | $\dashv$   | $\dashv$   | +          | ╣        |           | 106      | H            | -          | $\dashv$     | +          | +        | ╁        | +                   |               |         |                         |          |           |  |  |   |  |
| ļ        |                 | 8                  | -            |          |           |          |          |  |                 |              | 58       |          |  |                 | $\exists$ | 1  | $\exists$  | $\Box$     |          |           |          | 108          |            |              | 士          | $\top$   |          |                     |               |         |                         |          |           |  |  |   |  |
|          |                 | 9                  |              |          |           |          |          |  |                 |              |          |          |  | 59              |           |  |            |            | $\Box$   | $\Box$    | $\perp$  | $\perp$      | ٦.         |              | 109        |          |          | $\Box$              | $\perp$       | $\bot$  | $\perp$                 |          |           |  |  |   |  |
| -        |                 | 10<br>11           | _            | Н        | _         | _        | _        | ├  | $\vdash$        |              | $\vdash$ |          |  | 60<br>61        | $\vdash$  | H  |            | $\dashv$   | +        | $\dashv$  | +        | +            | -          |              | 110        | H        |          | $\dashv$            | +             | +       | ╁                       | +        | $\dashv$  |  |  |   |  |
| •        |                 | 12                 |              |          |           | -        |          | ┢  | 1               |              |          |          |  | 62              | Ħ         | Н  |            | $\exists$  | $\top$   |           | $\perp$  | $\dagger$    |            |              | 112        |          |          | 士                   | $\perp$       | $\pm$   |                         | $\Box$   |           |  |  |   |  |
|          |                 | 13                 | Z            |          |           |          |          |  |                 |              |          |          |  | 63              |           |  |            | $\Box$     | $\Box$   | $\dashv$  | $\perp$  | 4            | ٦.         |              | 113        |          |          | $\perp$             | 1             |         | Į.                      |          |           |  |  |   |  |
| }        |                 | 14<br>15           |              | _        | _         | _        |          | ++   | ╁               | _            | $\vdash$ |          |  | 64<br>65        | -         | _  | -          | $\dashv$   | +        | +         | $\dashv$ | +            | -          |              | 114<br>115 | $\vdash$ | $\dashv$ | +                   | +             | ╁       | ╁                       | +        | $\dashv$  |  |  |   |  |
|          |                 | 16                 | 1            |          |           |          | <u> </u> | <del>                                     </del> | <del> </del>    | <del> </del> |          |          |  | 66              |           |  |            |            | :        | $\exists$ | 士        |              | <u> </u>   |              | 116        |          |          | 士                   | $\dagger$     | 土       | $\perp$                 |          |           |  |  |   |  |
|          |                 | 17                 | Z            |          |           |          |          | _  | Ι               |              |          | 0        |  | 67              | $\Box$    |  |            |            |          | _         | $\perp$  | 4            | 4          |              | 117        |          | _        | 1                   | $\bot$        | _       | L                       | $\perp$  |           |  |  |   |  |
|          |                 | 18<br>19           | _            |          | +++       | -        | +        | -  | -               | -            |          |          | 68<br>69   | ┢               | H         | -  | $\dashv$   | $\dashv$   | $\dashv$ | +         | +        | $\dashv$     |            | 118          | Н          | $\dashv$ | -        | +                   | +             | ╁       | ╁                       | Н        |           |  |  |   |  |
|          |                 | 20                 |              |          |           |          |          |  |                 |              |          |          |  | 70              |           |  |            |            |          |           | 士        |              |            |              | 120        |          |          |                     |               |         | L                       |          |           |  |  |   |  |
| ſ        |                 | 21                 |              |          |           |          |          | L  | ŀ               | _            |          |          |  | 71              | <u> </u>  |  | $\dashv$   | 11         | _        | 4         | +        | -            | 4          | <u> </u>     | 121        |          | _        | -                   | +             | 4       | $oldsymbol{\downarrow}$ | ļ        | Щ         |  |  |   |  |
| }        |                 | 22<br>23           | ┝            | -        | _         |          | ┝        |  | $\vdash \vdash$ | ,            |          | 72<br>73 | $\vdash$   | $\vdash$        | Н         | -  | -          | $\dashv$   | -        | +         | -        |              | 122<br>123 | $\vdash$     | -          | $\dashv$ | +        | +-                  | ╁             | ╁       | $\dashv$                |          |           |  |  |   |  |
|          |                 | 24                 |              |          |           |          |          |  |                 |              |          | 74       |  |                 |           | 丁  |            |            |          |           |          |              | 124        |              |            |          |          |                     |               |         |                         |          |           |  |  |   |  |
|          |                 | 25                 | _            |          |           |          | ┞-       | <u> </u>   | _               |              |          | 75<br>76 | <u> </u>   | Ĺ               |           | $\dashv$   | _          | 4          |          | +         | $\dashv$ |              | 125<br>126 | Н            | _          | -        | +        | +                   | +             | $\perp$ |                         |          |           |  |  |   |  |
|          |                 | 26<br>27           | <u> </u>     | _        | _         | $\vdash$ | -        |  | ┢               |              | ×        | -        | 77   | ┢               | -         | $\vdash$   | $\dashv$   | $\dashv$   | $\dashv$ | $\dashv$  | +        | -            |            | 127          | $\vdash$   | $\dashv$ | $\dashv$ | +                   | +             | ╁       | +-                      | $\dashv$ |           |  |  |   |  |
|          |                 | 28                 |              |          |           |          |          |  |                 |              | e;       |          | 78   |                 |           |  |            |            |          |           |          |              |            | 128          |            |          | 耳.       |                     | #             | 1       |                         |          |           |  |  |   |  |
|          |                 | 29<br>30           | <u> </u>     | <u> </u> | _         | _        | L        |  | _               |              |          |          | 79<br>80   | ╁╌┤             | +         | L  | +-+        | $\dashv$   | $\dashv$ | $\dashv$  | +        | -            |            | 129<br>130   | Н          | -        |          | +                   | +             | ╀       | -                       | Щ        |           |  |  |   |  |
|          |                 | 31                 | -            | $\vdash$ |           | -        | -        | $\vdash$   | $\vdash$        | ╁            |          |          |  | 81              | $\vdash$  | -  | Н          |            | $\dashv$ |           | $\dashv$ | +            | - 12.0     |              | 131        | -        | $\dashv$ | t                   | +             | +       | 十                       | ╁        | -         |  |  |   |  |
|          |                 | 32                 |              |          |           |          |          |  |                 |              |          | ď        |  | 82              |           |  |            |            |          |           |          |              | ]          |              | 132        |          |          |                     | コ             | 1       |                         |          |           |  |  |   |  |
|          |                 | 33<br>34           | _            | Щ        |           | _        | _        | _  | -               | -            | _        |          |  | 83<br>84        | ļ         | lacksquare                                       | L          | -          | -        | 4         | $\dashv$ | +            |            | <u> </u>     | 133<br>134 | $\vdash$ | _        | 4                   | +             | +       | +                       | +        |           |  |  |   |  |
|          |                 | 35                 | -            | -        |           | ┝        | ┝        | -  | ╁               | ┢            | -        |          |  | 85              | $\vdash$  |  | H          | $\dashv$   | +        | $\dashv$  | $\dashv$ | +            | -          | ┢            | 135        | $\vdash$ |          | 十                   | +             | +       | ╁                       | ╁┈       | _         |  |  |   |  |
|          |                 | 36                 |              |          |           |          |          |  |                 |              |          | ٠.       |  | 86              |           |  |            | $\Box$     |          |           |          |              |            |              | 136        |          |          | 1                   |               |         |                         |          |           |  |  |   |  |
|          |                 | 37                 | $\vdash$     | $\vdash$ | <u> </u>  | L        | _        | -  | $\vdash$        | H            | -        |          |  | 87<br>88        | ├         | -  |            | $\dashv$   | -        | $\dashv$  | $\dashv$ | +            | _          | <u> </u>     | 137<br>138 | $\vdash$ | $\dashv$ | +                   | +             | +       | +                       | +        | Н         |  |  |   |  |
|          |                 | 38<br>39           | -            | H        |           | +        | $\vdash$ | +  | +-              | $\vdash$     | $\vdash$ | <u>;</u> |  | 89              | +         |  | H          | $\dashv$   | $\dashv$ | $\dashv$  | $\dashv$ | +            | ┨ "        | -            | 139        | $\vdash$ |          | -+                  | +             | +       | +                       | +        | $\vdash$  |  |  |   |  |
| į        |                 | 40                 |              |          |           |          |          |  |                 |              |          |          |  | 90              |           |  |            |            |          | コ         |          | $\downarrow$ |            |              | 140        | П        |          | 寸                   | #             | $\top$  | I                       |          |           |  |  |   |  |
|          |                 | 41                 | <u> </u>     | Щ        |           | L        | -        |  | H               | <u> </u>     | <u> </u> |          |  | 91<br>92        | <u> </u>  | _  |            | $\dashv$   | $\dashv$ | $\dashv$  | $\dashv$ | +            | $\dashv$   | <u> </u>     | 141<br>142 | $\vdash$ | _        |                     | +             | +       | +                       | +        | Н         |  |  | , |  |
|          |                 | 42<br>43           | -            | Н        | -         | -        | -        | +  | $\vdash$        | $\vdash$     | $\vdash$ |          |  | 93              | $\vdash$  |  | $\vdash$   | $\dashv$   | +        | $\dashv$  | $\dashv$ | +            | $\dashv$   | $\vdash$     | 143        | $\vdash$ | $\dashv$ | 十                   | +             | +       | +                       | +        | $\vdash$  |  |  |   |  |
|          |                 | 44                 |              |          |           |          |          |  |                 |              |          |          |  | 94              |           |  |            |            | $\Box$   | コ         | $\perp$  |              |            |              | 144        |          |          | $\Box$              |               | $\perp$ | $\perp$                 |          | $\square$ |  |  |   |  |
|          |                 | 45<br>46           | ļ            | Н        | _         | $\vdash$ | -        | -  | $\vdash$        | ├            | _        |          | <del>                                     </del> | 95<br>96        | -         |  |            | $\dashv$   | $\dashv$ | $\dashv$  | $\dashv$ | +            | -          |              | 145<br>146 | Н        | -        | +                   | +             | +       | +                       | +        | Н         |  |  |   |  |
| ŀ        |                 | 47                 | +            | H        |           | $\vdash$ | $\vdash$ | -  | -               | -            | -        |          |  | 97              | +-        | <del>                                     </del> | -          | $\forall$  | $\dashv$ | $\dashv$  | +        | +            | ┪          |              | 147        |          |          | $\exists^{\dagger}$ | $\dagger$     | $\pm$   | t                       |          |           |  |  |   |  |
| [        |                 | 48                 |              |          |           |          |          |  |                 |              |          |          |  | 98              |           |  |            |            |          |           | コ        | #            |            |              | 148        | П        |          |                     | 1             | 1       | L                       | 1        |           |  |  |   |  |